

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

91
1. **(Previously Presented)** A galenical formulation comprising paramagnetic perfluoroalkyl and diamagnetic perfluoroalkyl- compounds.

+4+5
+23+28

2. **(Currently amended)** A formulation according to claim 1, wherein the ratio of the paramagnetic perfluoroalkyl compound to the diamagnetic perfluoroalkyl-compound is from 5:95 and to 95:5.

3. **(Previously Presented)** A formulation according to claim 1, wherein the paramagnetic perfluoroalkyl and diamagnetic perfluoroalkyl- compounds are present dissolved in an aqueous solvent.

4. **(Previously Presented)** A formulation according to claim 1, wherein the paramagnetic perfluoroalkyl-containing compounds are those of general formula I:

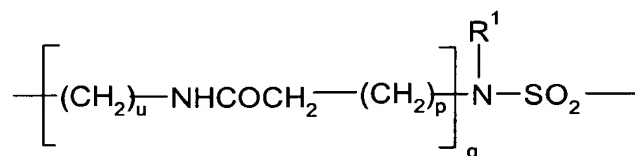


I

in which R^F represents a straight-chain or branched perfluoroalkyl radical with 4 to 30 carbon atoms, and A is a molecule portion that contains 1-6 metal complexes.

5. (Previously Presented) A formulation according to claim 4, wherein molecule portion A stands for a group L-M, wherein L stands for a linker and M stands for a metal complex that comprises an open-chain or cyclic chelating agent having a central atom of atomic number 21-29, 39, 42, 44 or 57-83.

6. (Withdrawn) A formulation according to claim 5, wherein linker L is a direct bond, a methylene group, an -NHCO group, a group

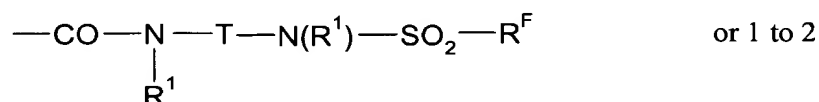


whereby p means the numbers 0 to 10, q and u,

independently of one another, mean the numbers 0 or 1, and

R^1 means a hydrogen atom, a methyl group, a $-\text{CH}_2\text{-OH}$ group, a $-\text{CH}_2\text{-CO}_2\text{H}$ group or a $\text{C}_2\text{-C}_{15}$ chain, which optionally is interrupted by 1 to 3 oxygen atoms, 1 to 2 $> \text{CO}$ groups or an optionally substituted aryl group and/or is substituted with 1 to 4 hydroxyl groups, 1 to 2 $\text{C}_1\text{-C}_4$ alkoxy groups, 1 to 2 carboxy groups,

or a straight-chain, branched, saturated or unsaturated $\text{C}_2\text{-C}_{30}$ carbon chain, which optionally contains 1 to 10 oxygen atoms, 1 to 3 $-\text{NR}^1$ groups, 1 to 2 sulfur atoms, a piperazine, a $-\text{CONR}^1$ group, an $-\text{NR}^1\text{CO}$ group, an $-\text{SO}_2$ group, an $-\text{NR}^1\text{-CO}_2$ group, 1 to 2 CO groups, a group



optionally substituted aryls and/or is interrupted by these groups and/or is optionally substituted with 1 to 3 $-OR^1$ groups, 1 to 2 oxo groups, 1 to 2 $-NH-COR^1$ groups, 1 to 2 $-CONHR^1$ groups, 1 to 2 $(-CH_2)_p-CO_2H$ groups, 1 to 2 groups $-(CH_2)_p-(O)_q-CH_2CH_2-R^F$,

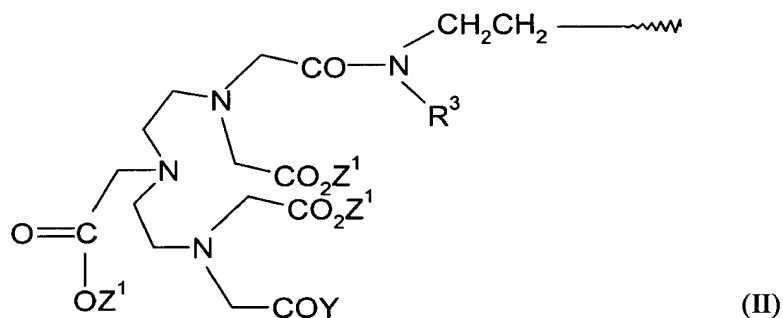
whereby

R^1 , and p and q have the above-indicated meanings,

and R^1 represents a straight-chain or branched perfluoroalkyl radical with 4 to 30 carbon atoms

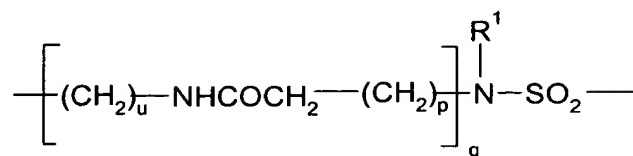
T means a C_2-C_{10} chain, which optionally is interrupted by 1 to 2 oxygen atoms or 1 to 2 $-NHCO$ groups.

7. **(Withdrawn)** A formulation according to claim 5, wherein metal complex M stands for a complex of general formula II



in which R^3 , Z^1 and Y are independent of one another, and

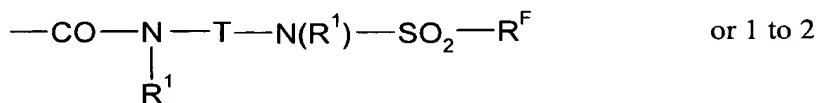
R^3 has the meaning of R^1 or $-(CH_2)_m-L-R^F$, whereby m is 0, 1 or 2, and L is a direct bond, a methylene group, an $-NHCO$ group, a group



whereby p means the numbers 0 to 10, q and u, independently of one another, mean the numbers 0 or 1, and

P1 Cont
 R^1 means a hydrogen atom, a methyl group, a $\text{---CH}_2\text{---OH}$ group, a $\text{---CH}_2\text{CO}_2\text{H}$ group or a $\text{C}_2\text{---C}_{15}$ chain, which optionally is interrupted by 1 to 3 oxygen atoms, 1 to 2 $> \text{CO}$ groups or an optionally substituted aryl group and/or is substituted with 1 to 4 hydroxyl groups, 1 to 2 $\text{C}_1\text{---C}_4$ alkoxy groups, 1 to 2 carboxy groups,

or a straight-chain, branched, saturated or unsaturated $\text{C}_2\text{---C}_{30}$ carbon chain, which optionally contains 1 to 10 oxygen atoms, 1 to 3 ---NR^1 groups, 1 to 2 sulfur atoms, a piperazine, a ---CONR^1 group, an $\text{---NR}^1\text{CO}$ group, an ---SO_2 group, an $\text{---NR}^1\text{---CO}_2$ group, 1 to 2 CO groups, a group



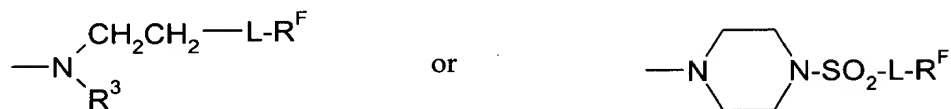
optionally substituted aryls and/or is interrupted by these groups and/or is optionally substituted with 1 to 3 ---OR^1 groups, 1 to 2 oxo groups, 1 to 2 ---NH---COR^1 groups, 1 to 2 ---CONHR^1 groups, 1 to 2 $\text{---(CH}_2)_p\text{---CO}_2\text{H}$ groups, 1 to 2 groups $\text{---(CH}_2)_p\text{---(O)}_q\text{---CH}_2\text{CH}_2\text{---R}^F$,

whereby

R^1 , and p and q have the above-indicated meanings, and R^F represents a straight-chain or branched perfluoroalkyl radical with 4 to 30 carbon atoms, and A is a molecule portion that contains 1-6 metal complexes,

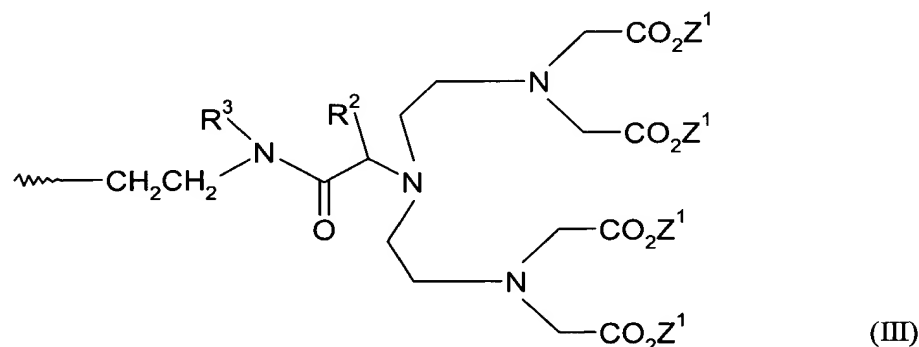
Z^1 , independently of one another, mean a hydrogen atom or a metal ion equivalent of atomic numbers 21-29, 39, 42, 44 or 57-83,

Y means $-OZ^1$ or



whereby Z^1 and R^3 have the above-mentioned meanings.

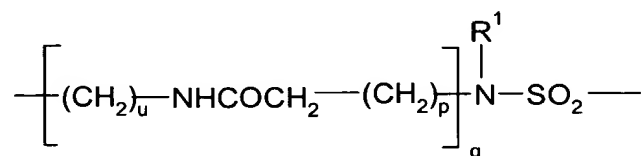
8. **(Withdrawn)** A formulation according to claim 5, wherein metal complex M stands for a complex of general formula III



in which

R^3 and Z^1 are independent of one another, and

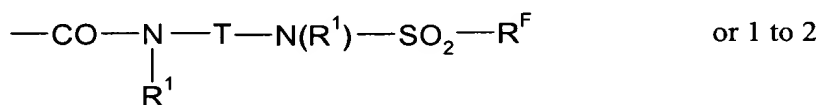
R^3 has the meaning of R^1 or $-(CH_2)_m\text{---L-R}^1$, whereby m is 0, 1 or 2, and L is a direct bond, a methylene group, an ---NHCO group, a group



whereby p means the numbers 0 to 10, q and u, independently of one another, mean the numbers 0 or 1, and

D1 Cont
 R^1 means a hydrogen atom, a methyl group, a $-CH_2-OH$ group, a $-CH_2-CO_2H$ group or a C_2-C_{15} chain, which optionally is interrupted by 1 to 3 oxygen atoms, 1 to 2 $>CO$ groups or an optionally substituted aryl group and/or is substituted with 1 to 4 hydroxyl groups, 1 to 2 C_1-C_4 alkoxy groups, 1 to 2 carboxy groups,

or a straight-chain, branched, saturated or unsaturated C_2-C_{30} carbon chain, which optionally contains 1 to 10 oxygen atoms, 1 to 3 $-NR^1$ groups, 1 to 2 sulfur atoms, a piperazine, a $-CONR^1$ group, an $-NR^1CO$ group, an $-SO_2$ group, an $-NR^1-CO_2$ group, 1 to 2 CO groups, a group



optionally substituted aryls and/or is interrupted by these groups and/or is optionally substituted with 1 to 3 $-OR^1$ groups, 1 to 2 oxo groups, 1 to 2 $-NH-COR^1$ groups, 1 to 2 $-CONHR^1$ groups, 1 to 2 $(-CH_2)_p-CO_2H$ groups, 1 to 2 groups $-(CH_2)_p-(O)_q-CH_2CH_2-R^F$,

whereby

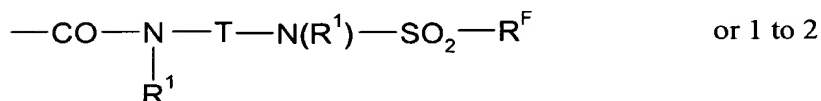
R^1 , and p and q have the above-indicated meanings,

and R^F represents a straight-chain or branched perfluoroalkyl radical with 4 to 30 carbon atoms, and A is a molecule portion that contains 1-6 metal complexes,

Z^1 , independently of one another, mean a hydrogen atom or a metal ion equivalent of atomic numbers 21-29, 39, 42, 44 or 57-83,

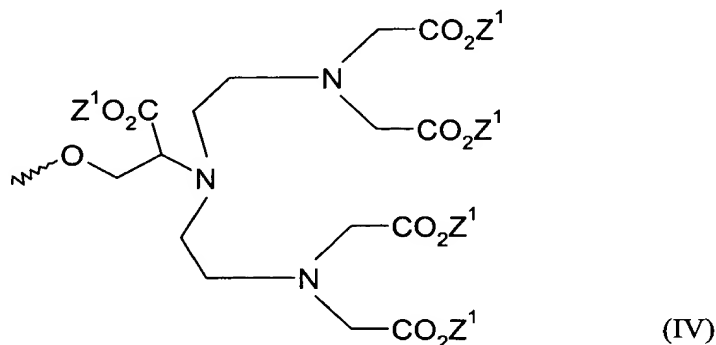
and R² means a hydrogen atom, a methyl group, a -CH₂-OH group, a -CH₂-CO₂H group or a C₂-C₁₅ chain, which optionally is interrupted by 1 to 3 oxygen atoms, 1 to 2 > CO groups or an optionally substituted aryl group and/or is substituted with 1 to 4 hydroxyl groups, 1 to 2 C₁-C₄ alkoxy groups, 1 to 2 carboxy groups,

or a straight-chain, branched, saturated or unsaturated C₂-C₃₀ carbon chain, which optionally contains 1 to 10 oxygen atoms, 1 to 3 -NR¹ groups, 1 to 2 sulfur atoms, a piperazine, a -CONR¹ group, an -NR¹CO group, an -SO₂ group, an -NR¹-CO₂ group, 1 to 2 CO groups, a group



optionally substituted aryls and/or is interrupted by these groups and/or is optionally substituted with 1 to 3 -OR¹ groups, 1 to 2 oxo groups, 1 to 2 -NH-COR¹ groups, 1 to 2 -CONHR¹ groups, 1 to 2 -(CH₂)_p-CO₂H groups, 1 to 2 groups -(CH₂)_p(O)_q-CH₂CH₂-R^F.

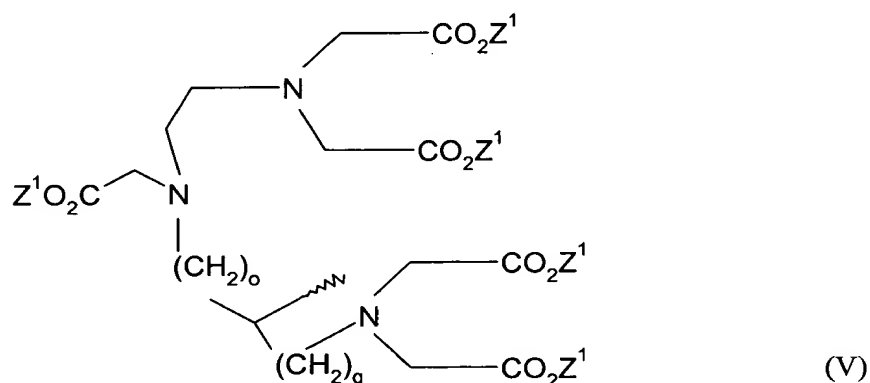
9. **(Withdrawn)** A formulation according to claim 5, wherein metal complex M stands for a metal complex of general formula IV



in which Z^1

independently of one another, mean a hydrogen atom or a metal ion equivalent of atomic numbers 21-29, 39, 42, 44 or 57-83.

10. **(Withdrawn)** A formulation according to claim 5, wherein metal complex M stands for a metal complex of general formula V

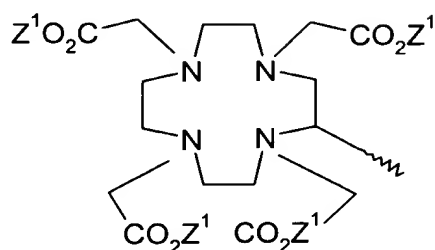


in which Z^1

independently of one another, mean a hydrogen atom or a metal ion equivalent of atomic numbers 21-29, 39, 42, 44 or 57-83,

and o and q stand for numbers 0 or 1, and yields the sum $o + q = 1$.

11. **(Withdrawn)** A formulation according to claim 5, wherein metal complex M stands for a metal complex of general formula VI

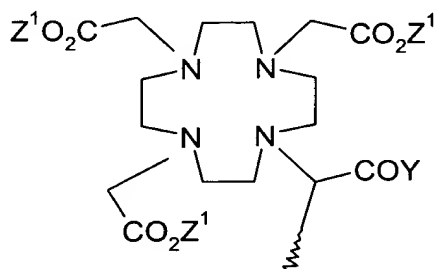


(VI)

in which Z^1

independently of one another, mean a hydrogen atom or a metal ion equivalent of atomic numbers 21-29, 39, 42, 44 or 57-83.

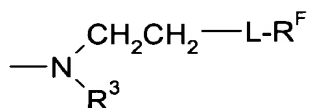
12. **(Withdrawn)** A formulation according to claim 5, wherein metal complex M stands for a metal complex of general formula VII



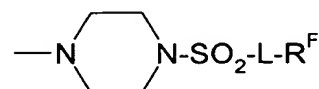
(VII)

in which Z^1 independently of one another, mean a hydrogen atom or a metal ion equivalent of atomic numbers 21-29, 39, 42, 44 or 57-83,

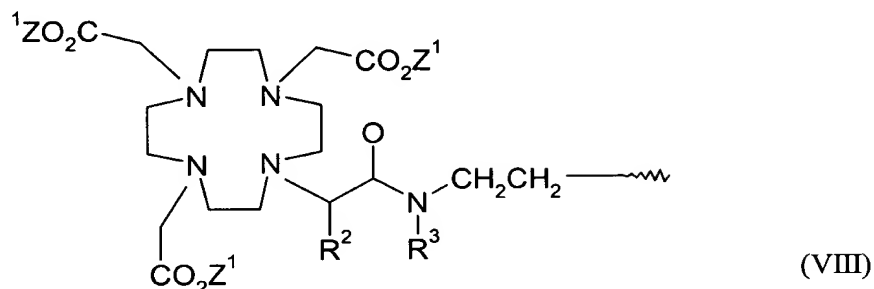
and Y means $-OZ^1$ or



or

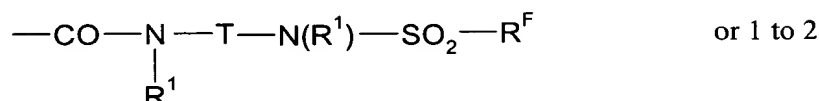


13. (Withdrawn) A formulation according to claim 5, wherein metal complex M is a complex of general formula VIII



in which

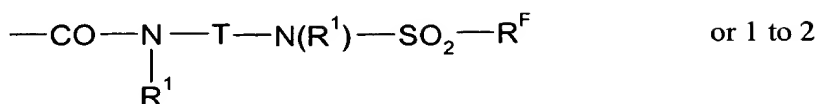
R^3 has the meaning of R^1 or $-(CH_2)_m-L-R^1$, whereby m is 0, 1 or 2, and L is a direct bond, a methylene group, an -NHCO group, a group



whereby p means the numbers 0 to 10, q and u,

independently of one another, mean the numbers 0 or 1, and

R^1 means a hydrogen atom, a methyl group, a $-CH_2-OH$ group, a $-CH_2-CO_2H$ group or a C_2-C_{15} chain, which optionally is interrupted by 1 to 3 oxygen atoms, 1 to 2 $>CO$ groups or an optionally substituted aryl group and/or is substituted with 1 to 4 hydroxyl groups, 1 to 2 C_1-C_4 alkoxy groups, 1 to 2 carboxy groups, or a straight-chain, branched, saturated or unsaturated C_2-C_{30} carbon chain, which optionally contains 1 to 10 oxygen atoms, 1 to 3 $-NR^1$ groups, 1 to 2 sulfur atoms, a piperazine, a $-CONR^1$ group, an $-NR^1CO$ group, an $-SO_2$ group, an $-NR^1-CO_2$ group, 1 to 2 CO groups, a group



optionally substituted aryls and/or is interrupted by these groups and/or is optionally substituted with 1 to 3 -OR¹ groups, 1 to 2 oxo groups, 1 to 2 -NH-COR¹ groups, 1 to 2 -CONHR¹ groups, 1 to 2 -(CH₂)_p-CO₂H groups, 1 to 2 groups -(CH₂)_p-(O)_q-CH₂CH₂-R^F,

whereby

R¹, and p and q have the above-indicated meanings,

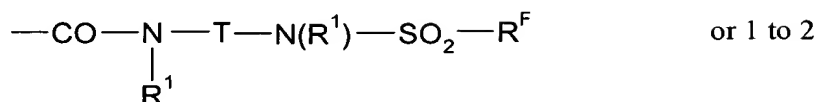
and R^F represents a straight-chain or branched perfluoroalkyl radical with 4 to 30 carbon atoms, and A is a molecule portion that contains 1-6 metal complexes, and

Z¹, independently of one another, mean a hydrogen atom or a metal ion equivalent of atomic numbers 21-29, 39, 42, 44 or 57-83,

and R²

means a hydrogen atom, a methyl group, a -CH₂-OH group, a -CH₂-CO₂H group or a C₂-C₁₅ chain, which optionally is interrupted by 1 to 3 oxygen atoms, 1 to 2 > CO groups or an optionally substituted aryl group and/or is substituted with 1 to 4 hydroxyl groups, 1 to 2 C₁-C₄ alkoxy groups, 1 to 2 carboxy groups,

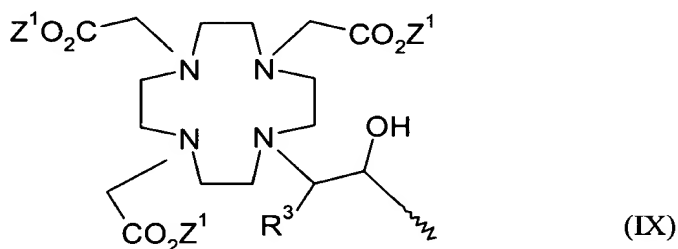
or a straight-chain, branched, saturated or unsaturated C₂-C₃₀ carbon chain, which optionally contains 1 to 10 oxygen atoms, 1 to 3 -NR¹ groups, 1 to 2 sulfur atoms, a piperazine, a -CONR¹ group, an -NR¹CO group, an -SO₂ group, an -NR¹-CO₂ group, 1 to 2 CO groups, a group



optionally substituted aryls and/or is interrupted by these groups and/or is optionally substituted with 1 to 3 -OR¹ groups, 1 to 2 oxo groups, 1 to 2 -NH-COR¹ groups, 1 to 2 -CONHR¹ groups, 1 to 2 -(CH₂)_p-CO₂H groups, 1 to 2 groups -(CH₂)_p-(O)_q-CH₂CH₂-R^F.

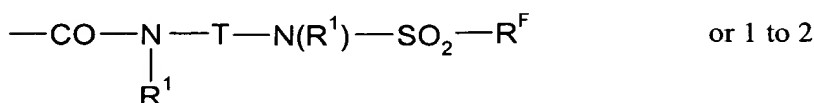
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cont*

14. (Withdrawn) A formulation according to claim 5, wherein metal complex M is a complex of general formula IX



in which

R³ has the meaning of R¹ or -(CH₂)_m-L-R^F, whereby m is 0, 1 or 2, and L is a direct bond, a methylene group, an -NHCO group, a group



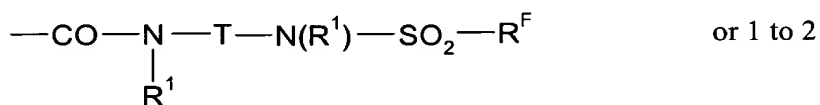
whereby p means the numbers 0 to 10, q and u,

independently of one another, mean the numbers 0 or 1, and

R¹ means a hydrogen atom, a methyl group, a -CH₂-OH group, a -CH₂-CO₂H group or a C₂-C₁₅ chain, which optionally is interrupted by 1 to 3 oxygen atoms, 1 to 2 > CO groups or an optionally substituted aryl group and/or is

substituted with 1 to 4 hydroxyl groups, 1 to 2 C₁-C₄ alkoxy groups, 1 to 2 carboxy groups,

or a straight-chain, branched, saturated or unsaturated C₂-C₃₀ carbon chain, which optionally contains 1 to 10 oxygen atoms, 1 to 3 -NR¹ groups, 1 to 2 sulfur atoms, a piperazine, a -CONR¹ group, an -NR¹CO group, an -SO₂ group, an -NR¹-CO₂ group, 1 to 2 CO groups, a group



optionally substituted aryls and/or is interrupted by these groups and/or is optionally substituted with 1 to 3 -OR¹ groups, 1 to 2 oxo groups, 1 to 2 -NH-COR¹ groups, 1 to 2 -CONHR¹ groups, 1 to 2 (-CH₂)_p-CO₂H groups, 1 to 2 groups -(CH₂)_p-(O)_q-CH₂CH₂-R¹,

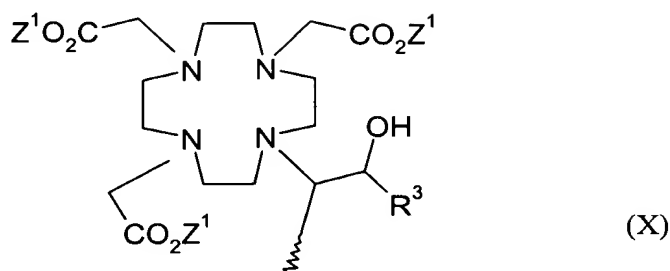
whereby

R¹, and p and q have the above-indicated meanings,

and R^F represents a straight-chain or branched perfluoroalkyl radical with 4 to 30 carbon atoms, and A is a molecule portion that contains 1-6 metal complexes, and

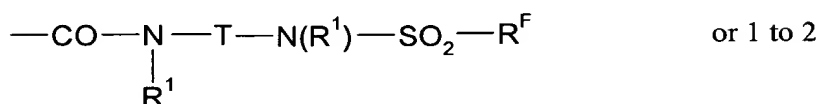
Z¹, independently of one another, mean a hydrogen atom or a metal ion equivalent of atomic numbers 21-29, 39, 42, 44 or 57-83,

15. (Withdrawn) A formulation according to claim 5, wherein metal complex M is a complex of general formula X



in which

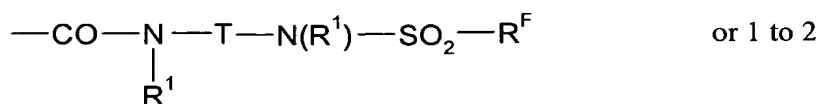
R^3 has the meaning of R^1 or $-(CH_2)_m-L-R^1$, whereby m is 0, 1 or 2, and L is a direct bond, a methylene group, an $-NHCO$ group, a group



whereby p means the numbers 0 to 10, q and u , independently of one another, mean the numbers 0 or 1, and

R^1 means a hydrogen atom, a methyl group, a $-CH_2-OH$ group, a $-CH_2-CO_2H$ group or a C_2-C_{15} chain, which optionally is interrupted by 1 to 3 oxygen atoms, 1 to 2 $>CO$ groups or an optionally substituted aryl group and/or is substituted with 1 to 4 hydroxyl groups, 1 to 2 C_1-C_4 alkoxy groups, 1 to 2 carboxy groups,

or a straight-chain, branched, saturated or unsaturated C_2-C_{30} carbon chain, which optionally contains 1 to 10 oxygen atoms, 1 to 3 $-NR^1$ groups, 1 to 2 sulfur atoms, a piperazine, a $-CONR^1$ group, an $-NR^1CO$ group, an $-SO_2$ group, an $-NR^1-CO_2$ group, 1 to 2 CO groups, a group



optionally substituted aryls and/or is interrupted by these groups and/or is optionally substituted with 1 to 3 $-OR^1$ groups, 1 to 2 oxo groups, 1 to 2 $-NH-COR^1$ groups, 1 to 2 $-CONHR^1$ groups, 1 to 2 $(-CH_2)_p-CO_2H$ groups, 1 to 2 groups $-(CH_2)_p-(O)_q-CH_2CH_2-R^F$,

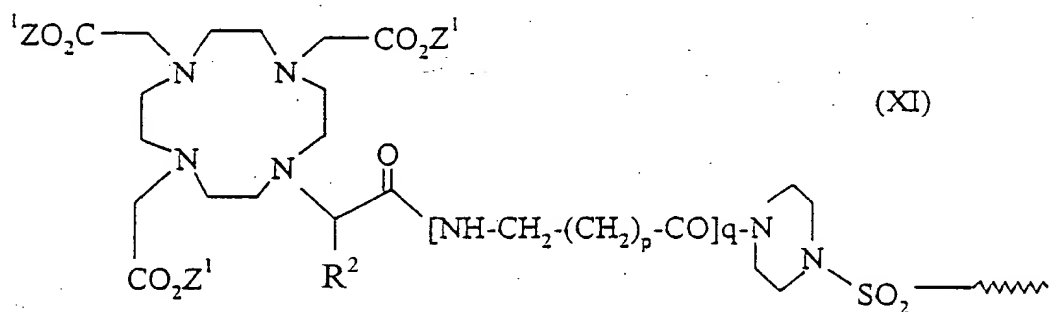
whereby

R^1 , and p and q have the above-indicated meanings,

and R^F represents a straight-chain or branched perfluoroalkyl radical with 4 to 30 carbon atoms, and A is a molecule portion that contains 1-6 metal complexes, and

Z^1 , independently of one another, mean a hydrogen atom or a metal ion equivalent of atomic numbers 21-29, 39, 42, 44 or 57-83.

16. (Previously Presented) A formulation according to claim 5, wherein metal complex M is a complex of general formula XI



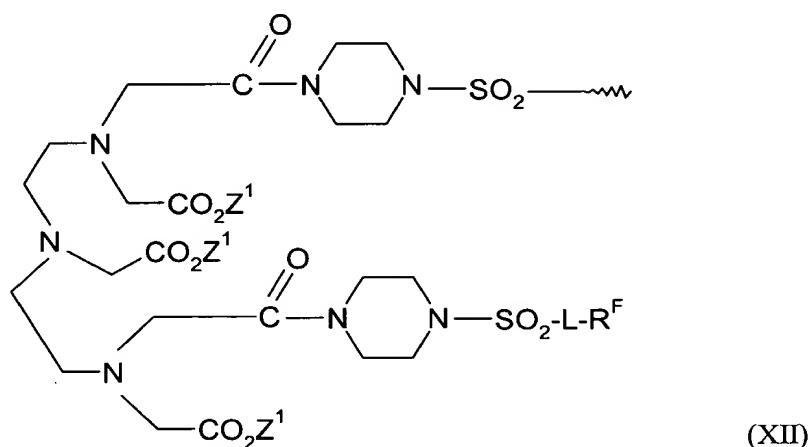
in which

Z^1 , independently of one another, mean a hydrogen atom or a metal ion equivalent of atomic numbers 21-29, 39, 42, 44 or 57-83,

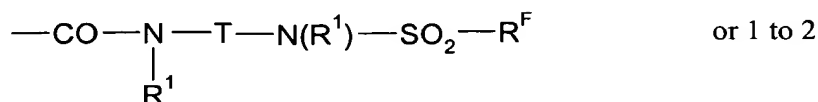
and whereby p means the numbers 0 to 10, q and u,

independently of one another, mean the numbers 0 or 1, and
 R^2 means a hydrogen atom, a methyl group, a $-\text{CH}_2\text{-OH}$ group, a $-\text{CH}_2\text{-CO}_2\text{H}$ group or a $\text{C}_2\text{-C}_{15}$ chain, which optionally is interrupted by 1 to 3 oxygen atoms, 1 to 2 $-\text{CO}-$ groups or an optionally substituted aryl group and/or is substituted with 1 to 4 hydroxyl groups, 1 to 2 $\text{C}_1\text{-C}_4$ alkoxy groups, 1 to 2 carboxy groups.

17. **(Withdrawn)** A formulation according to claim 5, wherein metal complex M is a complex of general formula XII



in which L is a direct bond, a methylene group, an $-\text{NHCO}$ group, a group

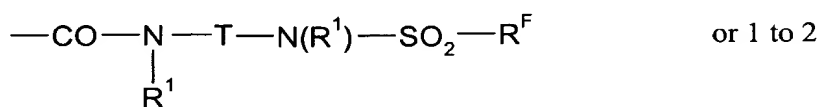


whereby p means the numbers 0 to 10, q and u,

independently of one another, mean the numbers 0 or 1, and
 R^1 means a hydrogen atom, a methyl group, a $-\text{CH}_2\text{-OH}$ group, a $-\text{CH}_2\text{-CO}_2\text{H}$ group or a $\text{C}_2\text{-C}_{15}$ chain, which optionally is interrupted by 1 to 3 oxygen

atoms, 1 to 2 > CO groups or an optionally substituted aryl group and/or is substituted with 1 to 4 hydroxyl groups, 1 to 2 C₁-C₄ alkoxy groups, 1 to 2 carboxy groups,

or a straight-chain, branched, saturated or unsaturated C₂-C₃₀ carbon chain, which optionally contains 1 to 10 oxygen atoms, 1 to 3 -NR¹ groups, 1 to 2 sulfur atoms, a piperazine, a -CONR¹ group, an -NR¹CO group, an -SO₂ group, an -NR¹-CO₂ group, 1 to 2 CO groups, a group



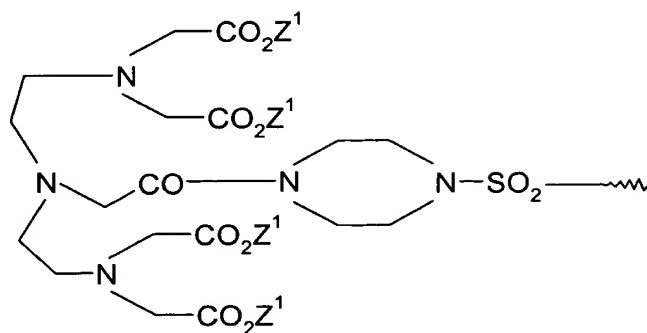
optionally substituted aryls and/or is interrupted by these groups and/or is optionally substituted with 1 to 3 -OR¹ groups, 1 to 2 oxo groups, 1 to 2 -NH-COR¹ groups, 1 to 2 -CONHR¹ groups, 1 to 2 (-CH₂)_p-CO₂H groups, 1 to 2 groups -(CH₂)_p-(O)_q-CH₂CH₂-R^F,

whereby

R¹, and p and q have the above-indicated meanings,

R^F represents a straight-chain or branched perfluoroalkyl radical with 4 to 30 carbon atoms, and A is a molecule portion that contains 1-6 metal complexes, and Z¹, independently of one another, mean a hydrogen atom or a metal ion equivalent of atomic numbers 21-29, 39, 42, 44 or 57-83.

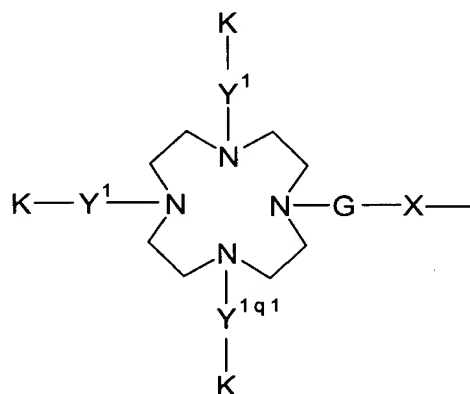
18. (Withdrawn) A formulation according to claim 5, wherein metal complex M is a complex of general formula XIII



(XIII)

in which Z^1 , independently of one another, mean a hydrogen atom or a metal ion equivalent of atomic numbers 21-29, 39, 42, 44 or 57-83.

19. **(Withdrawn)** A formulation according to claim 4, wherein molecule portion A has the following structure:

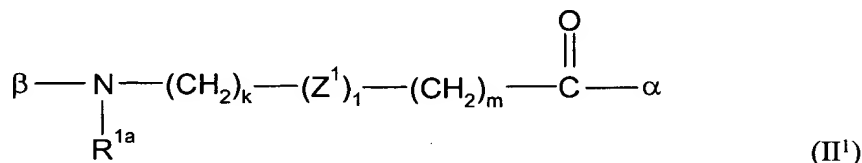


whereby

- q^1 is a number 0, 1, 2 or 3,
- K stands for a complexing agent or metal complex or salts thereof of organic and/or inorganic bases or amino acids or amino acid amides,
- X is a direct bond for the perfluoroalkyl group, a phenylene group or a C_1 - C_{10} alkyl chain, which optionally contains 1-15 oxygen atoms, 1-5 sulfur atoms, 1-10 carbonyl

groups, 1-10 (NR) groups, 1-2 NRSO₂ groups, 1-10 CONR groups, 1 piperidine group, 1-3 SO₂ groups, 1-2 phenylene groups or optionally is substituted by 1-3 radicals R^F, in which R stands for a hydrogen atom, a phenyl, benzyl or a C₁-C₁₅ alkyl group, which optionally contains 1-2 NHCO groups, 1-2 CO groups, 15 oxygen atoms and optionally is substituted by 1-5 hydroxy, 1-5 methoxy, 1-3 carboxy, 1-3 R^F radicals,

- Y is a direct bond or a chain of general formula II¹ or III¹



in which

- R^{1a} is a hydrogen atom, a phenyl group, a benzyl group or a C₁-C₇ alkyl group, which optionally is substituted with a carboxy group, a methoxy group or a hydroxy group,
- Z¹ is a direct bond, a polyglycol ether group with up to 5 glycol units or a molecule portion of general formula IV¹



in which R^{2a} is a C₁-C₇ carboxylic acid, a phenyl group,

a benzyl group or a -(CH₂)₁₋₅-NH-K group,

- α represents the binding to the nitrogen atom of the skeleton chain, β represents the binding to the complexing agent or metal complex K,
- and in which variables k and m stand for natural numbers between 0 and 10, and 1 stands for 0 or 1,

and whereby

- G is a CO or SO₂ group.

20. **(Withdrawn)** A formulation according to claim 5, in which linker L stands for a molecule portion according to general formula XIV



in which

N represents a nitrogen atom,

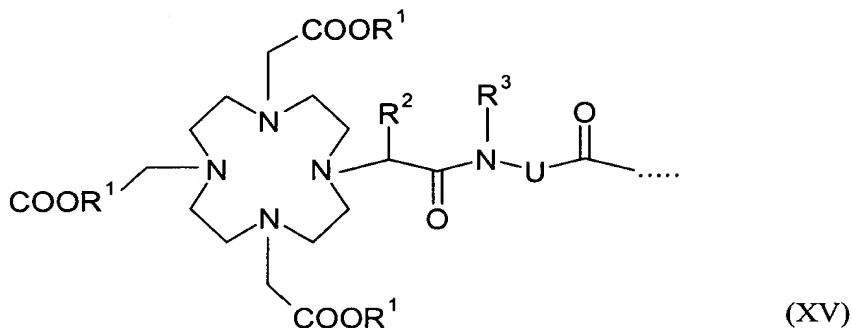
A1 means a hydrogen atom, a straight-chain or branched C₁-C₃₀ alkyl group, which optionally is interrupted by 1-15 oxygen atoms and/or optionally is substituted with 1-10 hydroxy groups, 1-2 COOH groups, a phenyl group, a benzyl group and/or 15 -OR⁴ groups, with R⁴ in the meaning of a hydrogen atom or a C₁-C₇ alkyl radical, or B1-R¹,

B1 means a straight-chain or branched C₁-C₃₀ alkylene group that optionally is interrupted by 1-10 oxygen atoms, 1-5 -NH-CO groups, 1-5 -CO-NH groups, by a phenylene group (that is optionally substituted by a COOH group), 1-3 sulfur atoms, 1-2 -N(B2)-SO₂ groups, and/or 1-2 -SO₂-N(B2) groups with B2 in the meaning of A1, an NHCO group, a CONH group, an N(B2)-SO₂ group, or an -SO₂-N(B2) group and/or optionally is substituted with radical R^F a straight or branched perfluoroalkyl radical with 4 to 30 carbon atoms,

and in which a represents the binding to metal complex M, and b

represents the binding to a straight or branched perfluoroalkyl radical with 4 to 30 carbon atoms.

21. (Withdrawn) A formulation according to claim 5, wherein metal complex M stands for a metal complex of general formula XV



whereby R^1 stands for a hydrogen atom or a metal ion equivalent of atomic numbers 21-29, 31, 32, 37-39, 42-44, 49 or 57-83,

R^2 and R^3 stand for a hydrogen atom, a C_1 - C_7 alkyl group, a benzyl group, a phenyl group, $-CH_2OH$ or $-CH_2-OCH_3$,

U stands for radical L, in which radical L stands for a molecule portion according to general formula XIV



in which

N represents a nitrogen atom,

A1 means a hydrogen atom, a straight-chain or branched C_1 - C_{30} alkyl group, which optionally is interrupted by 1-15 oxygen atoms and/or optionally is substituted with 1-10 hydroxy groups, 1-2 COOH groups, a phenyl group, a benzyl group and/or 1-5 $-OR^1$ groups, with R^4 in the meaning of a hydrogen atom or a C_1 - C_7 alkyl radical, or $B1-R^F$

P. Cont

B1 means a straight-chain or branched C₁-C₃₀ alkylene group that optionally is interrupted by 1-10 oxygen atoms, 1-5 -NH-CO groups, 1-5 -CO-NH groups, by a phenylene group (that is optionally substituted by a COOH group), 1-3 sulfur atoms, 1-2 -N(B2)-SO₂ groups, and/or 1-2 -SO₂-N(B2) groups with B2 in the meaning of A1, an NHCO group, a CONH group, an N(B2)-SO₂ group, or an -SO₂N(B2) group and/or optionally is substituted with radical R^F a straight or branched perfluoroalkyl radical with 4 to 30 carbon atoms,

and in which a represents the binding to metal complex M, and b

represents the binding to a straight or branched perfluoroalkyl radical

with 4 to 30 carbon atoms.

whereby L and U, independently of one another, can be the same or different, however.

22. **(Withdrawn)** A formulation according to claim 1, wherein the central atom of the metal complex is a gadolinium atom (atomic number 64).

23. **(Previously presented)** A formulation according to claim 1, wherein the diamagnetic, perfluoroalkyl-containing substances are those of general formula XVI:

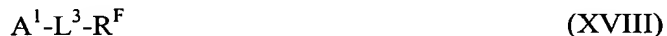


in which R^F represents a straight-chain or branched perfluoroalkyl radical with 4 to 30 carbon atoms, L stands for a linker, and B² stands for a hydrophilic group.

24. **(Previously presented)** A formulation according to claim 23, wherein linker L¹ is a direct bond, an -SO₂ group or a straight-chain or branched carbon chain with up to 20 carbon atoms, which can be substituted with one or more -OH, -COO⁻, -SO₃ groups and/or optionally contains one or more -O-, -S-, -CO-, -CONH-, -NHCO-, -CONR-, -NRCO-, -SO₂-, -PO₄⁻, -NH, -NR groups, an aryl ring or a piperazine, whereby R stands for a C₁ to C₂₀ alkyl radical, which in turn can contain one or more O atoms and/or can be substituted with -COO⁻ or SO₃ groups.

25. **(Previously presented)** A formulation according to claim 23, wherein the hydrophilic group is a monosaccharide or a disaccharide, one or more adjacent -COO⁻ or -SO₃ groups, a dicarboxylic acid, an isophthalic acid, a picolinic acid, a benzenesulfonic acid, a tetrahydropyrandicarboxylic acid, a 2,6-pyridinecarboxylic acid, a quaternary ammonium ion, an aminopolycarboxylic acid, an aminodipolyethyleneglycosulfonic acid, an aminopolyethylene glycol group, an SO₂-(CH₂)₂-OH group, a polyhydroxyalkyl chain with at least two hydroxyl groups or one or more polyethylene glycol chains with at least two glycol units, whereby the polyethylene glycol chains are terminated by an -OH or -OCH₃ group.

26. **(Withdrawn)** A formulation according to claim 1, wherein the diamagnetic perfluoroalkyl containing substances are conjugates that consist of α-, β-, or γ-cyclodextrin and compounds of general formula XVIII:



in which A¹ stands for an adamantane, biphenyl or anthracene molecule, L³ stands for a linker and R^F stands for a straight-chain or branched perfluoroalkyl radical with 4 to 30

carbon atoms; and whereby linker L³ is a straight-chain hydrocarbon chain with 1 to 20 carbon atoms, which can be interrupted by one or more oxygen atoms, one or more CO-, SO₂-, CONH-, NHCO-, CONR-, NRCO-, NH-, NR groups or a piperazine, whereby R is a C₁-C₅ alkyl radical.

27. **(Withdrawn)** A formulation according to claim 1, wherein the perfluoroalkyl chains of the perfluoroalkyl-containing metal complex and the other perfluoroalkyl-containing compounds contain 6 to 12 carbon atoms.

28. **(Withdrawn)** A formulation according to claim 1, wherein the perfluoroalkyl chains contain 8 carbon atoms in each case.

29. **(Withdrawn)** A formulation according to claim 1, wherein it has a metal concentration of 50 to 250 mmol/ l.

30. **(Withdrawn)** A substance of general formula XVII



in which R^F represents a straight-chain or branched perfluoroalkyl radical with 4 to 30 carbon atoms, and X¹ is a radical that is selected from the group of the following radicals (in this case, n is a number between 1 and 10):

31. **(Withdrawn)** A conjugate that consist of α -, β -, or γ -cyclodextrin and compounds of general formula XVIII



in which A^1 stands for an adamantane, biphenyl or anthracene molecule, L^3 stands for a linker and R^1 stands for a straight-chain or branched perfluoroalkyl radical with 4 to 30 carbon atoms, and whereby linker L^3 is a straight-chain hydrocarbon chain with 1 to 20 carbon atoms, which can be interrupted by one or more oxygen atoms, one or more CO-, SO₂-, CONH-, NHCO-, CONR-, NRCO-, NH-, NR groups or a piperazine, whereby R is a C₁-C₅ alkyl radical.

32. **(Withdrawn)** A process for the production of galenical formulations according to claim 1, wherein the paramagnetic and diamagnetic perfluoroalkyl-containing compounds are dissolved in a solvent while being stirred vigorously.

33. **(Withdrawn)** A process for the production of galenical formulations according to claim 1, wherein the paramagnetic and diamagnetic perfluoroalkyl-containing compounds are dissolved in a solvent while being treated simultaneously with ultrasound.

34. **(Withdrawn)** A process for the production of galenical formulations according to claim 1, wherein the paramagnetic and diamagnetic perfluoroalkyl-containing compounds are dissolved in a solvent while being treated simultaneously with microwaves.

35. **(Withdrawn)** A process for the production of galenical formulations according to claim 1, wherein the paramagnetic and diamagnetic perfluoroalkyl-containing compounds are dissolved in two different solvents, both solutions are added together, and one of the two solvents is distilled off.

36. **(Withdrawn)** A solid formulation according to claim 1, wherein it is produced by freeze-drying a solution, which contains paramagnetic and diamagnetic perfluoroalkyl-containing substances.

37. **(Withdrawn)** Contrast media for nuclear spin tomography comprising galenical formulations according to claim 1.

38. **(Withdrawn)** Contrast media for visualizing lymph nodes or a blood-pool comprising galenical formulations according to claim 1.

39. **(Currently amended)** A formulation according to claim 2, wherein the ratio of the paramagnetic perfluoroalkyl compound to the diamagnetic perfluoroalkyl compound is from 40:60 ~~and to~~ 60:40.

40. **(Previously Presented)** A formulation according to claim 2, wherein the diamagnetic perfluoroalkyl-compound is from 5-40%.

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Contd*

41. (New) A method of magnetic resonance imaging comprising administering to a patient a contrast agent which is a galenical formulation of claim 1 and taking a H-based, T₁-weighted magnetic resonance image of the patient.
